AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 2

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
0002	05 APR 2000		

6. ISSUED BY CODE

US ARMY ENGINEER DISTRICT, FORT WORTH
ATTN: CESWF-CT (RM 2A19)
PO BOX 17300
FORT WORTH, TX 76102-0300

7. ADMINISTERED BY *(If other than Item 6)* CODE

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

CODE FACILITY CODE

(√)	
X	9A. AMENDMENT OF SOLICITATION NO. DACW63-00-B-0014
	9B. DATED *(SEE ITEM 11)* 8 MARCH 2000
	10A. MODIFICATION OF CONTRACTS/ORDER NO.
	10B. DATED *(SEE ITEM 13)*

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☒ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

(√)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation date, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

The Solicitation for RIPRAP, COLLECTOR SYSTEM AND DITCH REPAIR, SAM RAYBURN DAM AND RESERVOIR, TEXAS, is amended as follows:

See Continuation Sheet.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*		16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*	
15B. CONTRACTOR/OFFEROR *(Signature of person authorized to sign)*	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY *(Signature of Contracting Officer)*	16C. DATE SIGNED

Item 14. Continued.

A. CHANGE TO BID OPENING DATE

Standard Form 1442, First Page, Item No. 13.A.- In the second line, change the bid opening date from "11 APRIL 2000, AT 2 P.M. LOCAL TIME " to ""18 APRIL 2000, AT 2 P.M. LOCAL TIME. "

B. CHANGES TO BIDDING SCHEDULE

Replace the Bidding Schedule, pages 00010-3 through 00010-5, with the accompanying new Bidding Schedule, bearing the notation "ACCOMPANYING AMENDMENT NO. 0002 TO SOLICITATION NO. DACW63-00-B-0014."

C. CHANGES TO THE SPECIFICATIONS

Replacement Section - Replace the following section with the accompanying new section of the same number and title, bearing the notation "ACCOMPANYING AMENDMENT NO. 0002 TO SOLICITATION NO. DACW63-00-B-0014:"

Section No.	Title
02278	RIPRAP

END OF AMENDMENT

ACCOMPANYING AMENDMENT NO. 0002 TO SOLICITATION NO. DACW63-00-B-0014

RIPRAP, COLLECTOR SYSTEM, & DITCH REPAIR (Title)
Sam Rayburn Dam and Reservoir, Texas (Location)

Solicitation No. DACW63-00-B-0014
SRRCD

BIDDING SCHEDULE
(To be attached to SF 1442)

BASE BID: All work required by the plans and specifications exclusive of work required by Options.

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
0001	Riprap (East Embankment)	2,663	Tons	$_____	$_____
0002	Riprap(West Embankment)	5,417	Tons	$_____	$_____
0003	Grout	10	Cu Yd	$_____	$_____
0004	Buried Collector System	2000	linear ft	$_____	$_____
[AM#0002] 0005	Ditch Repair	**196**	linear ft	$_____	$_____
				TOTAL BASE BID	$_____
Option 1. 0006	Riprap	1,141	Tons	$_____	$_____
Option 2. 0007	Riprap	1,902	Tons	$_____	$_____
Option 3. 0008	Riprap	1,902	Tons	$_____	$_____
Option 4. 0009	Grout	10	Cu Yd	$_____	$_____
Option 5. 0010	Grout	5	Cu Yd	$_____	$_____
Option 6. 0011	Grout	3	Cu Yd	$_____	$_____

BIDDING SCHEDULE (cont)

Item No.	Description	Estimated Quantity	Unit	Unit Price	Estimated Amount
Option 7. 0012	Buried Collector System	500	Linear ft	$_____	$_____
Option 8. 0013	Ditch Repair	30	Linear ft	$_____	$_____
Option 9. 0014	Ditch Repair	60	Linear ft	$_____	$_____
Option 10. 0015	Ditch Repair	90	Linear ft	$_____	$_____
Option 11. 0016	Ditch Repair	120	Linear ft	$_____	$_____

OPTIONS TOTAL $_____

TOTAL BASE BID AND OPTION NOS 1 THRU 11 $_____

NOTES:

1. ARITHMETIC DISCREPANCIES (EFARS 14.407-2)

(a) For the purpose of initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the bidding schedule as submitted by bidders:

(1) Obviously misplaced decimal points will be corrected;

(2) In case of discrepancy between unit price and extended price, the unit price will govern;

(3) Apparent errors in extension of unit prices will be corrected; and

(4) Apparent errors in addition of lump-sum and extended prices will be corrected.

(b) For the purposes of bid evaluation, the Government will proceed on the assumption that the bidder intends his bid to be evaluated on the basis of the unit prices, extensions, and totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the abstract of bids.

(c) These correction procedures shall not be used to resolve any ambiguity concerning which bid is low.

BIDDING SCHEDULE (cont)

NOTES: (cont)

2. If a modification to a bid based on unit prices is submitted, which provides for a lump sum adjustment to the total estimated cost, the application of the lump sum adjustment to each unit price in the bid schedule must be stated. If it is not stated, the bidder agrees that the lump sum adjustment shall be applied on a pro rata basis to every unit price in the bid schedule.

3. Bidders must bid on all items.

4. Costs attributable to Division 01 - General Requirements are assumed to be prorated among bid items listed.

5. For the purpose of this solicitation, the word "item" shall be considered to mean "schedule" as used in Provision 52.214-0019, CONTRACT AWARD--SEALED BIDDING--CONSTRUCTION, in Section 00100 INSTRUCTIONS, CONDITIONS, AND NOTICES TO BIDDERS, excluding additives, deductives, or optional items.

6. EXERCISE OF OPTIONS (SWDR 715-1-1 (16 January 1996))

The Government reserves the right to exercise the option(s) by written notice to the Contractor either singularly or in any combination for up to 60 calendar days after award of the Base Bid without an increase in the Offeror's Bid Price. Completion of added items shall continue at the same schedule as the Base Bid unless otherwise noted in Section 01000 CONSTRUCTION SCHEDULE, paragraph 1 entitled SCHEDULE.

END OF BIDDING SCHEDULE

SECTION 02278

RIPRAP
Amend 0002

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CORPS OF ENGINEERS, HANDBOOK FOR CONCRETE AND CEMENT

CRD-C 137	Soundness of Aggregate by Use of Sodium Sulfate or Magnesium Sulfate
CRD-C 144	Method of Testing Stone for Resistance to Freezing and Thawing

CORPS OF ENGINEERS, ENGINEERING MANUAL

EM 1110-2-1906	Laboratory Soils Testing 30 Nov 1970

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 88-76	Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C 127-80	Specific Gravity and Absorption of Coarse Aggregate
ASTM C 131-81	Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine

1.2 MEASUREMENT

1.2.1 Riprap

Unit for measurement for riprap will be the ton of riprap material satisfactorily placed in the work.

1.3 PAYMENT

1.3.1 Riprap

All costs associated with riprap will be paid on the basis of tons of riprap satisfactorily placed for required permanent work as shown on the drawings or as required by the Contracting Officer at the contract unit price per ton for "Riprap." Such payment shall be based on the weight of riprap as documented by certified scale receipts and amount actually placed

on the required work. This payment shall constitute full compensation for furnishing the materials from a commercial source and placing the riprap as specified.

1.3.2 Rock Access Ramp

No separate payment will be made for rock access ramps. All labor, riprap, and incidentals necessary to complete the rock access ramps as described herein or as shown on the drawings shall be included in the contract price for "Riprap."

[AM #0002]
1.3.3 Access From Crest of Dam

If the Contractor plans on conducting the upstream riprap repair work from the crest of the dam the following requirements must be met:

a. One lane of traffic on R255 must remain open at all times.
b. A detailed traffic control plan must be developed by the contractor, then reviewed and approved by the Contracting Officer before work may start. The Contracting Officer will not review this plan until it has been approved by TexDOT.
c. Required permits, if any, must be obtained from TexDOT.
d. Since the roadway is relatively new, a joint condition survey will be conducted prior to start of work and damage (if any) will be repaired by the Contractor at his expense.
e. Special attention should be given to Placement Procedures listed in paragraphs 3.5.3.1 and 3.5.3.2.

1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-08, Statements

Designation of Source of Riprap; GA.

The Contractor shall designate in writing the source(s) from which it is proposed to furnish materials for riprap (paragraph 3.2.1).

SD-09, Reports

Reports of Quality Control; GA.

The Contractor shall inspect, and certify compliance with contract requirements of all materials and operations (paragraph 3.6).

SD-13, Certificates

Materials; GA.

The Contractor shall submit certificate(s) of compliance from the material supplier certifying that the materials furnished for riprap under this specification comply with the quality requirements.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL

The work under this section consists of furnishing all plant, labor, equipment and materials and performing all operations in connection with the addition of riprap to the upstream slope of the embankment. These materials shall be placed as shown on the drawings in accordance with the specifications and applicable drawings or as otherwise directed by the Contracting Officer.

3.2 RIPRAP MATERIAL

3.2.1 General

Materials shall be durable stone as approved by the Contracting Officer's Representative. Gypsum, anhydrite, chert, shale, and soft or weathered rock will not be approved. The Contractor shall, at least 30 days in advance of planned placement, designate in writing the source or sources from which he proposes to furnish materials. Suitable test results and service records will be used to determine the acceptability of the materials as to quality. In the event that recent quality evaluation test reports and a service record that are acceptable to the Contracting Officer's Representative are not available, the materials shall be subjected to such tests described below as are necessary to determine its acceptability for use in the work. Quality evaluation tests will be made by the Government and at its expense. When tests are required, suitable test samples of riprap shall be obtained by the Contractor under the direct supervision of the Contracting Officer, and submitted for approval testing by shipping to U.S. Army Engineers Waterways Experiment Station, ATTN: CEWES-GS-GD (T.J. Griffing), 3909 Halls Ferry Road, Vicksburg, MS 39180-6199. Costs of shipping or delivery of test samples will be at the expense of the Contractor. Test samples shall be submitted at least 60 days in advance of the time when the placing of the stone protection is expected to begin. Stone materials shall not be delivered to the site of the work prior to approval of the test samples. The total overall weight of the sample of riprap shall approximate 1,000 pounds and representative pieces shall weigh not more than 100 pounds. The Contractor shall designate in writing only one source or one combination of sources from which he proposes to furnish stone materials. The maximum number of stone quality tests that will be conducted at Government expense will be one (1). The costs of any additional tests shall be borne by the Contractor.

3.2.2 Construction Material Sources

Materials for riprap meeting the quality requirements of this specification have in the past been produced from the sources listed hereinafter.

Source	Type of Material	Producer and Location
Arc Spur	Limestone	Texas Industries, Inc., Arlington, TX, produces from a quarry located six (6) miles north of Bridgeport, TX.
Georgetown	Limestone	Texas Crushed Stone Company, Austin, TX, produces from a quarry located three (3) miles south of Georgetown, TX.
Ardmore	Limestone	Dolese Brothers Company, Oklahoma City, OK, produces from Davis quarry located seven (7) miles northeast of Ardmore, OK.
Bridgeport	Limestone	Lone Star Cement Corporation, Houston, TX, produces from a quarry located twelve (12) miles southwest of Weatherford, TX.

3.2.3 Quality of Stone for Riprap

Stone for riprap shall be durable and of a suitable quality to insure permanence in the structure and in the climate in which it is to be used. It shall be free from cracks, seams, and other defects that would tend to increase unduly its deterioration from natural causes. The inclusion of objectionable quantities of dirt, sand, clay, and rock fines will not be permitted.

3.2.4 Tests for Quality

Tests to which the materials may be subjected include petrographic analysis, specific gravity, abrasion, absorption, wetting and drying, freezing and thawing, and such other tests as may be considered necessary to demonstrate to the satisfaction of the Contracting Officer's Representative that the materials are acceptable for use in the work. Tests and test values listed below are for job controls of stone and will be used to help determine the acceptability (as to quality) of riprap material being produced.

3.2.4.1 Weight and Absorption

The minimum weight per solid cubic foot calculated from the bulk specific gravity (saturated surface-dry) of the sample determined in accordance with the procedure in ASTM C 127, shall be 150 pounds. Absorption shall not exceed 6 percent by weight. Test samples shall be 1-1/2 inches to 2-1/2 inches in size.

3.2.4.2 Soundness (Freezing and Thawing)

The loss of weight of stone after 20 cycles of freezing and thawing with test specimen immersed in water shall be less than 15 percent. Each cycle shall consist of 16 hours freezing at temperature of 5 degrees F, and 8 hours thawing at temperature of 100 degrees F. The test specimens shall be prepared in accordance with the requirements of CRD-C 144, and shall be

1-1/2 inches to 2-1/2 inches in size.

3.2.4.3 Soundness (Magnesium Sulfate Test)

The loss of weight of stone after testing with five cycles of magnesium sulfate shall not exceed 15 percent. The tests shall be in accordance with the procedures designated in CRD-C 137 and ASTM C 88. The tests shall be performed on 1-1/2 to 2-1/2-inch size samples.

3.2.4.4 Resistance to Abrasions

Stone shall be subjected to the Los Angeles Abrasion Test (ASTM C 131) and shall show a loss in weight of not more than 40 percent after 500 revolutions.

3.3 FOUNDATION PREPARATION

Since the new riprap will be placed directly on the existing upstream slope riprap, no special foundation preparation is required. Any loose, non rock, material, driftwood, debris and the like will be removed from the areas to receive new riprap.

3.4 ROCK ACCESS RAMP

The Contractor may construct a rock access ramp on the surface of the existing embankment riprap surface. If this ramp is constructed out of granular "choker stone," it shall be left in place and no separate payment will be made for the ramp construction or material. If this ramp is constructed out of specified riprap material, the ramp may be removed towards the end of the work and the rock in the ramp may be moved into the required riprap section. This material may then count towards riprap placed. All access ramps and roads shall be constructed so the traffic lanes are at or above elevation 167.0 feet NGVD.

3.5 PLACEMENT OF RIPRAP

3.5.1 Placement Into Required Section

The Contractor shall place a minimum of 5.92 Tons of riprap per linear foot of riprap section to be placed for east embankment. The Contractor shall place a minimum of 2.71 Tons of riprap per linear foot of riprap section to be placed for west embankment. Any variation of tonnage exceeding 10 percent by weight per linear foot will be adjusted to conform by the Contractor.

3.5.2 Gradation

Stone for riprap shall be placed within the limits shown on the drawings or otherwise as directed by the Contracting Officer's Representative. Either boulders or quarried rock may be used as stone if conforming to the applicable requirements of Paragraph 3.2, RIPRAP MATERIAL as to quality. The riprap shall be reasonably well graded from the minimum size stone permitted to the maximum size stone permitted. Neither the breadth nor the thickness of any piece of stone shall be less than one-third of its length.

During production, the stone shall be sampled and tested by the Contractor as often as deemed necessary by the Contracting Officer's Representative to determine if compliance with the gradation provisions of the specifications will be possible using the stone being produced. The Contractor shall provide all necessary equipment and labor for the taking, processing and weighing of representative samples, both at the source and in-place. The riprap shall be graded within the following limits (in-place):

Maximum Size	90 Percent Size (1)	Average Size (2)	8 Percent Size (3)
(1100 lbs)	(600-950 lbs)	(225-350 lbs)	(50 lbs)

Notes:

(1) Defined as that size such that 90 percent of the stone, by weight, is smaller and 10 percent is larger.

(2) Defined as that size such that 50 percent of the total stone, by weight, is larger and 50 percent is smaller.

(3) Not more than 8 percent of the stone, by weight, shall consist of pieces weighing less than the weights shown.

(4) Additionally, no more than 1% (by weight) shall consist of dirt, sand, and small rocks.

3.5.3 Placement Procedures

The Contractor shall provide and set grade stakes transversely, and at the top and bottom of the new riprap section. A specified plus or minus tolerance for the finished surface of the riprap will not be required. The Contracting Officer shall approve the finished surface, and if, in the opinion of the Contracting Officer, excessive amounts of riprap have been placed outside the lines shown on the drawings, that riprap shall be paid for by the Contractor. The intent of these specifications is to require placement of riprap in a manner that will produce a well keyed and stable mass of rocks with a finished surface corresponding to, the lines and grades shown on the drawings. The larger rocks shall be well distributed and the entire mass of rocks in their final position shall conform to the gradation specified hereinbefore. The finished riprap shall be free from objectionable pockets of small rocks and clusters of larger rocks. The desired distribution of the various sizes of rocks throughout the mass shall be obtained by selective loading of the material at the quarry or other source; by controlled dumping of successive loads during final placing, or by other methods of placement which will produce the specified results. Rearranging of individual rocks by mechanical equipment may be required to some extent to obtain a reasonably well graded distribution of rock sizes.

3.5.3.1 Placement Procedures Required

(1) Placement in such a manner as to minimize segregation and avoid displacement of underlying materials;

(2) the riprap shall be placed in one operation by means of truck, skip box, clam, rock-bucket, orange peel, or hydraulic excavator ("Gradall" or approved equal). No other method of placement shall be used without written approval of the Contracting Officer's Representative and the approval will be contingent on the Contractor's continued ability to provide an acceptable product;

(3) riprap shall be placed up the slope from the bottom of the required section;

(4) The Contractor shall provide sufficient labor during placement for rearrangement of loose stone, to comply with the end-product requirement of a well keyed and stable mass; and

(5) the in-place riprap shall conform to the gradation specified.

3.5.3.2 Placement Procedures Not Permitted

(1) Heavy tracked equipment on the new riprap surface;

(2) dumping of riprap at a higher elevation and rolling into place;

(3) moving riprap by drifting and manipulating or leveling by means of dozer, dragline bucket or other blade equipment;

(4) final finishing of the riprap with heavy plates or similar methods which would result in breakdown of the in-place riprap;

(5) placing riprap by dumping into chutes or by similar methods likely to cause segregation of the various sizes; and

(6) placing riprap in layers.

3.6 QUALITY CONTROL

3.6.1 Contractor Quality Control

The Contractor shall inspect and certify compliance with contract requirements, test if required, and record all inspections and required tests of all materials and operations, including, but not limited to the following:

(1) Equipment
(2) Materials
(3) Construction methods
(4) Line, grade, tolerance, and gradation

If tests indicate materials or workmanship not to be in conformance with the specifications, the materials shall be removed and replaced with materials meeting these specifications at no additional cost to the government. No material may be delivered to the work site prior to approval of tests and/or certifications.

3.6.2 Gradation Tests

It is the intent of this specification to rely on certifications for compliance with the required gradations. If, in the Contracting Officers opinion, the in-place riprap does not meet the specified requirements, one in-place gradation test shall be performed on the material. If the results of this in-place test determines the material is out of specification, the contractor shall remove and replace with correct material and shall receive no compensation for the in-place gradation test. If the results of the test indicate that the material was in compliance, the test will be at government expense. Additionally, gradation tests on entire truckloads of material may be required if the Contracting Officer suspects excessive amounts of dirt, sand, and small rocks outside the one (1) percent by weight allowed. These tests will be at the discretion of the Contracting Officer and under his direction. Tests will be paid for by the Government if the gradation falls within the fines limit. If the gradation is outside the acceptable limit, the test will be paid for by the Contractor. The truckload which has been tested and has failed the gradation test will be refused, and no other riprap shall be placed until the Contractor can show that subsequent trucks will fall within the acceptable limits.

3.6.3 Riprap

If it is required, the Contractor shall use the following procedure in performing the gradation test on in-place riprap material or a truck load of riprap material under the direction of the Contracting Officer's Representative:

(1) The sample shall be taken by the Contractor at a location designated by the Contracting Officer. The sample shall consist of the full section of in-place finished riprap over a minimum area of 10 feet square or a truckload of riprap material. The Contractor shall provide all necessary labor, equipment and scales (sling type).

(2) Weigh and record results individually for each piece weighing over the specified eight (8) percent size.

(3) Weigh, collectively, all pieces weighing less than the specified eight percent size and record total weight of this size material.

(4) Calculate the cumulative percent passing and plot size in pounds against the percent passing. Determine the average depth/thickness over which the sample was obtained.

(5) Report results on ENG Form 4055. If any tests on riprap materials indicate that the materials do not meet gradation requirements, the materials shall be reworked or replaced as directed with materials meeting the specified requirements.

-- End of Section --